UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/780,548	02/09/2001	David John Zanzig	DN1999061P01	1552

7590 08/06/2003

The Goodyear Tire & Rubber Company
Patent & Trademark Department-D/823
1144 East Market Street
Akron, OH 44316-0001

EXAMINER	
MAKI, STEVEN D	

ART UNIT	PAPER NUMBER
1733	8

DATE MAILED: 08/06/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Offic Action Summary	Application N .	Applicant(s)	
	09/780,548	ZANZIG ET AL.	
	Examiner	Art Unit	
	Steven D. Maki	1733	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Peri d f r Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *30 May 2003* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-6 and 9-18* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-6 and 9-18* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

1) With respect to the amendment filed 5-30-03:

(1) claim 5 should indicate "(original)";

(2) claim 7 should indicate "(canceled)";

(3) claim 8 should indicate "(canceled)".

2) The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3) Claims 1-6 and 9-18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1 part (B)(1); the description relating to mixtures is ambiguous. In claim 1 part (B)(1), it is suggested to change "their mixtures their mixtures" to --their mixtures--..

4) The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5) **Claims 1-6 and 9-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brown et al (WO 99/52720) in view of Thise (US 5284898), Matsuo (US 5929157) and Shibata (US 4152186) and optionally further in view of Ahmad et al (US 4703079) and/or Sandstrom et al (US 6046266).**

WO 99/52720 to Brown et al is available as prior art under 35 USC 102(b) since (a) the filing date of this CIP application is 2-9-01 (none of the claims in this application are entitled to the benefit of the filing date of the parent application 09/260815 since the

claims of this CIP application are not directed solely to the subject matter disclosed in 09/260815, see MPEP 201.11, page 200-74, Rev. Feb. 2003, WHEN NOT ENTITLED TO BENEFIT OF FILING DATE) and (b) the publication date (10-21-99) of WO 99/52720 is more than one year before the filing date (2-9-01) of this application.

US Patent 6046266 to Sandstrom et al remains available as prior art under 35 USC 102(e) and 35 USC 102(a). Sandstrom et al has not been excluded as 102(e) prior art per 35 USC 103(c) because applicant stated "The invention of Sandstrom and the invention were commonly owned, or under an obligation of assignment to the same person" instead of --Application 09/780548 and US 6046266 were, at the time the invention was made, commonly owned, or under an obligation of assignment to the same person-- (emphasis added). US 6046266 is also available as prior art under 35 USC 102(a) since (a) the filing date of this CIP application is 2-9-01 (none of the claims in this application are entitled to the benefit of the filing date of the parent application 09/260815 since the claims of this CIP application are not directed solely to the subject matter disclosed in 09/260815, see MPEP 201.11, page 200-74, Rev. Feb. 2003, WHEN NOT ENTITLED TO BENEFIT OF FILING DATE); (b) the inventive entity of this application and US 6046266 are different and (c) the publication date (4-4-00) of US 6046266 is before the filing date (2-9-01) of this application. WO 99/52720 is not relied upon to establish that US 6046266 is available as prior art under 35 USC 102(a).

Brown et al discloses a pneumatic tire (off road tire / truck tire) having a tread and sidewalls. The tread comprises a lug and groove configuration which extends over the sidewall to a radial location upto 65% of the section height of the tire. At page 8 lines 16-20, Brown et al teaches that the sidewall comprises a rubber composition comprising natural rubber, cis 1, 4 polybutadiene, carbon black, silica and coupling agent. Brown et al is silent as to the composition of the tread.

As to the tread, it would have been obvious to one of ordinary skill in the art to use the claimed tread rubber composition for the portion 100 of Brown et al's tread defining the ground contact width TWc since (1) Brown et al desires *good on road tread wear* while also *gaining in traction in conditions of wet conditions*, etc (page 2 lines 10-11, page 9 lines 29-33) and (2) Thise suggests using a rubber composition comprising a diene rubber and high structure carbon black having a DBP of 120-140 and an iodine

number of 120-160 (e.g. **N121** carbon black) as a tread rubber composition for a truck tire having *good tread wear and good traction of wet roads*. One of ordinary skill in the art would readily understand that use of silica in Thise's tread composition is optional. In any event: It would have been obvious to exclude silica and coupling agent for the silica from the tread composition of Thise since (a) the only reinforcing filler which Thise teaches is required is the high structure carbon black and (b) Matsuo suggests not using silica in a tread composition to prevent static electricity discharge problems and/or Ahmad et al teaches avoiding using silica in a tread composition for a truck tire containing high structure carbon black to avoid problems such as decreased tread wear.

As to the sidewall, it would have been obvious to use the claimed composition for Brown et al's sidewall since (1) Brown et al and Matsuo and optionally Sandstrom et al suggest using a composition comprising natural rubber, cis 1, 4 polybutadiene, carbon black, silica and coupling agent as a sidewall composition and (2) Matsuo adds to the disclosure of Brown et al by specifically suggesting using a composition comprising not less than 30 parts natural rubber, 30-70 parts polybutadiene, 5-50 parts carbon black such as FEF (**N550**), 10-60 parts silica having a BET of not more than 180 and a coupling agent as a sidewall composition *so that the tire has superior wear resistance, good flex cracking and cut growth resistance to bending, superior wet property and lowered rolling resistance* and optionally since (3) Sandstrom et al adds to the disclosure of Brown et al by teaching a sidewall rubber composition for *truck tires* comprising 100 phr diene based elastomers including 20-60 phr cis 1, 4 polyisoprene having a Tg of -65 degrees C to about -75 degrees C and 40-80 phr cis 1, 4

polybutadiene rubber having a Tg of -100 degrees C to -110 degrees C, 40-80 phr reinforcing filler including 20-60 phr silica having a BET of for example 50-300 square meters per gram and 15-60 phr carbon black having a DBP of 65-130 cc/100g and an Iodine number of 25-85 g /kg wherein the weight ratio of silica to carbon is 1/1 to 3/1; and a coupling agent. .

As to the lug and groove configuration extending over at least 30% of the sidewall (claim 1) / extends over at least 50% of the sidewall (claim 2) / extends to at least the maximum section width of the tire (claim 3), Brown et al suggests this subject matter since Brown et al teaches extending the lug and groove configuration over the sidewall to a radial location upto 65% of the section height of the tire.

As to the lug and groove configuration of the sidewall being of the sidewall composition instead of the tread composition, it would have been obvious to one of ordinary skill in the art to use the sidewall composition suggested by Brown et al and Matsuo and the optional Sandstrom et al for the lug and groove configuration of the sidewall since (1) the lug and groove configuration between the lateral edge of the tread and the radial location upto 65% of the section height of the tire is at a sidewall location, (2) Matsuo suggests using different compositions for the tread and the sidewall and (3) Shibata et al teaches that the tread layer requires abrasion resistance (good tread wear) whereas the sidewall rubber requires flexing resistance. One of ordinary skill in the art would readily appreciate from the applied prior art that the portion of the lug and groove configuration of Brown et al **at the sidewall location** requires a composition *different* from the portion of the lug and groove configuration at **the ground contacting tread**

portion 100 between the tread edges the simple reason that sidewalls of a tire have different requirements than the tread as clearly evidenced by Shibata et al.

As to claims 4-6, the limitations therein regarding exclusion of elastomers (exclusion of elastomers having Tg in a range of -70 degrees C to about -100 degrees C / exclusion of specified elastomers) would been obvious in view of Brown et al's teaching to use natural rubber and cis 1, 4 polybutadiene in the sidewall rubber composition (natural rubber having a Tg between -65 to -75 degrees C being taken as well known per se and cis 1, 4 polybutadiene having a Tg over 100 degrees C being taken as well known per se) and optionally in view of Sandstrom et al's teachings regarding sidewall composition.

As to claims 9-11, the limitations therein (additional elastomer) would have been obvious in view of Matsuo's teaching that SBR may also be used in a sidewall rubber composition and optionally Sandstrom et al's teachings regarding sidewall composition..

As to claims 12-16, the claimed coupling agent would have been obvious in view of (a) the teachings in Matsuo (column 3) regarding which coupling agent to use and optionally (b) each of the described coupling agent is taken as a well known silica coupler for silica in a rubber composition for a tire component.

As to claim 17, use of the specified carbon black (e.g. **N550**) for the sidewall would have been obvious in view of Matsuo's teaching to use carbon black such a FEF (N550) for a sidewall composition.

As to claim 18, use of the specified carbon black (e.g. **N121**) for the tread would have been obvious in view of Thise's suggestion to use a carbon black such as N121 for the tire tread composition.

Remarks

6) Applicant's arguments with respect to claims 1-6 and 9-18 have been considered but are moot in view of the new ground(s) of rejection.

Applicant states: "The portion of the tire tread (41, 42 and 49) is apparently a structural extension of the tread (40) over the tire casing (the tire sidewall) and is therefore differentiated from and appears to be compositionally de-coupled from the sidewall rubber composition of the tire casing itself". In response, the examiner comments that Brown et al does not teach that the traction elements 41, 43 at the side of the tire as shown for example in figure 5 are "compositionally de-coupled" from the sidewall composition of the tire casing itself.

No obvious type double patenting rejection over 09/260815 has been made since 09/260815 is abandoned.

Carbon Black is cited of interest to show that FEF is also described as N550.

7) No claim is allowed.

8) Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven D. Maki whose telephone number is 703-308-2068. The examiner can normally be reached on Mon. - Fri. 7:30 AM - 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Ball can be reached on (703) 308-2058. The fax phone numbers

for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Steven D. Maki
August 2, 2003

STEVEN D. MAKI 8-2-03
PRIMARY EXAMINER
~~GROUP 1300~~
AU 1733